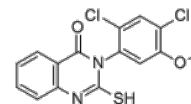


Product Name : Mdivi-1
Cat. No. : PC-21364
CAS No. : 338967-87-6
Molecular Formula : C₁₅H₁₀Cl₂N₂O₂S
Molecular Weight : 353.22
Target : Dynamamin
Solubility : 10 mM in DMSO



Biological Activity

Mdivi-1 (Mitochondrial division inhibitor 1) is a selective dynamin-related protein 1 (Drp1) inhibitor and mitochondrial division/mitophagy inhibitor.

Mdivi-1 inhibits Dnm1 assembly and GTPase activity in vitro.

Mdivi-1 does not affect Dynamamin-1 GTPase activity in vitro and the two mitochondrial dynamamin family members that mediate yeast mitochondrial fusion, Fzo1 or Mgm1.

Mdivi-1 prevents the release of cytochrome c from isolated mitochondria by cleaved Bid.

Mdivi-1 prevents mitochondria division and Bax-mediated mitochondrial outer membrane permeabilization during apoptosis.

Mdivi-1 attenuates both tubular cell apoptosis and acute kidney injury in proximal tubular cells in mice during renal ischemia/reperfusion and cisplatin-induced nephrotoxicity.

References

Tanaka A, et al. Mol Cell. 2008 Feb 29;29(4):409-10.

Brooks C, et al. J Clin Invest. 2009 May;119(5):1275-85.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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